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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,676	02/06/2001	Kevin Guangjun Cai	110102.00109	2527

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/776,676

Applicant(s)

CAI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch et al. (WO 93/05520) in view of Kataoka et al. (6,007,472).

Koch discloses a cable including an outer metallic sheath (16), at least one metallic conductor (12) therein, and mineral insulation (10) disposed between the outer sheath and the metallic conductor, wherein the mineral insulation comprises MgO and kaolin additive (see the Derwent abstract).

Koch does not specifically disclose the amount of kaolin in the insulation, ranges of 3% to 20% or 3% to 15% or 5% to 10% by dry weight.

Kataoka et al. discloses a heat insulating material comprising kaolin in an amount of 5 to 50 wt.%. Noted that since kaolin in Kataoka et al. is in powder form, the weight percentage of kaolin used in Kataoka et al. is by dry weight.

It would have been obvious to one skilled in the art to use the kaolin amount taught by Kataoka et al. in the insulation of Koch to form a heat insulating material.

The features of kaolin additive preventing moisture from infiltrating the insulation and increasing the resistivity of the insulation at high temperature are inherent from the cable of Koch since it comprises structure and material as claimed.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koch.

Koch discloses a cable including an outer metallic sheath (16), at least one metallic conductor (12) therein, and mineral insulation (10) disposed between the outer sheath and the metallic conductor, wherein the mineral insulation comprises MgO and kaolin additive (see the Derwent abstract).

Koch does not specifically disclose drawing down the metallic sheath in making the cable. However, it would have been obvious to one skilled in the art to draw down the metallic sheath of Koch to form the cable since drawing down an outer sheath in forming a cable is known in the art.

The features of kaolin additive preventing moisture from infiltrating the insulation and increasing the resistivity of the insulation at high temperature are inherent from the cable of Koch since it comprises structure and material as claimed.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Koch.

Koch discloses a cable including an outer metallic sheath (16), at least one metallic conductor (12) therein, and mineral insulation (10) disposed between the outer sheath and the metallic conductor, wherein the mineral insulation comprises MgO and kaolin additive (see the Derwent abstract). The features of kaolin additive preventing moisture from infiltrating the insulation and increasing the resistivity of the insulation at high temperature are inherent from the cable of Koch since it comprises structure and material as claimed.

### *Response to Arguments*

7. Applicant's arguments filed July 26<sup>th</sup> 2002 have been fully considered but they are not persuasive.

Regarding the 102(b) rejection, applicant argues that Koch et al. discloses kaolin being added to a spinel material which is made from MgO and Al<sub>2</sub>O<sub>3</sub>, and it does not disclose adding kaolin to just MgO. This argument is not found persuasive because the claims recite the mineral insulation **comprising**, and not consisting of, an MgO insulation. Therefore, the claims do not exclude additional elements. Accordingly, claim 19 is anticipated by Koch et al.

In response to applicant's argument that Koch et al. discloses adding kaolin to a non-polymer insulation material, while Kataoka et al. discloses adding kaolin to a polymer insulation material, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Moreover, the materials of both Koch et al. and Kataoka et al. are insulation materials.

### *Summary*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will

be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



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Art Unit: 2831

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A handwritten signature in cursive script, appearing to read 'Chau N Nguyen', written in black ink.

Chau N Nguyen  
Primary Examiner  
Art Unit 2831

CN  
August 30, 2002